### PATENT COOPERATION TREATY

| REC'D       | 0 | 3 | JAN | 2006 |
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## PCT

## INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

(Chapter II of the Patent Cooperation Treaty)

(PCT Article 36 and Rule 70)

| Applicant's of JHB/0336   | or agent's file reference<br>4WOJILH   | FOR FURTHER AC                                       | TION  | See Form PCT/IPEA/416   |               |  |
|---|--|--|---|---|---------------|--|
| International application No. International filing date PCT/GB2004/004313 11.10.2004                              |  |  | lay/month/year)                                 | Priority date (day/month/year) 09.10.2003   |               |  |
|   | Patent Classification (IPC) or no<br>04, G01N25/02, G01N25/72  |  | С   |   |               |  |
| Applicant<br>UNIVERS  | SITY OF SOUTHAMPTON  | et al.   |   |   |               |  |
| 1. This   | <ol> <li>This report is the international preliminary examination report, established by this International Preliminary Examining Authority under Article 35 and transmitted to the applicant according to Article 36.</li> </ol>                          |  |   |   |               |  |
| 2. This   | REPORT consists of a total   | of 5 sheets, including th                            | is cover sheet.                                 |   |               |  |
| 3. This   | report is also accompanied b   | y ANNEXES, comprisin                                 | g:  |   |               |  |
| a. 🛭  | sent to the applicant and t  |  |   |   |               |  |
|   | sheets of the description, claims and/or drawings which have been amended and are the basis of this report<br>and/or sheets containing rectifications authorized by this Authority (see Rule 70.16 and Section 607 of the<br>Administrative Instructions). |  |   |   |               |  |
|   | sheets which supersede earlier sheets, but which this Authority considers contain an amendment that goes beyond the disclosure in the international application as filed, as indicated in item 4 of Box No. I and the Supplemental Box.                    |  |   |   |               |  |
| b. □  | (sent to the International E<br>sequence listing and/or tal<br>Box Relating to Sequence  | oles related thereto, in co                          | omputer readable forn                           | er of electronic carrier(s)) , containir<br>n only, as indicated in the Supplemen<br>e Instructions). | ng a<br>ital  |  |
| 4. This   | report contains indications re   | elating to the following it                          | ems:  |   |               |  |
| ⊠ E   | Box No. I Basis of the op  | inion  |   | ·   |               |  |
| □ E   | Box No. II Priority  |  |   |   |               |  |
|   | ☐ Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability   |  |   |   |               |  |
| □ E   | Box No. IV Lack of unity of  |  |   |   |               |  |
| ⊠ E   | Box No. V Reasoned state applicability; cit  | ement under Article 35(2<br>tations and explanations | ) with regard to novel<br>supporting such state | ty, inventive step or industrial<br>ement   |               |  |
|   | Box No. VI Certain docum   |  |   |   |               |  |
|   |  | in the international appl                            |   |   |               |  |
|   | ☐ Box No. VIII Certain observations on the international application   |  |   |   |               |  |
| Date of sub   | mission of the demand  | <del></del>  | Date of completion of                           | this report   |               |  |
| 18.07.2005  |  |  | 04.01.2006                                      |   |               |  |
| Name and  | mailing address of the internatio  | nal  | Authorized Officer                              | duches Peteng   | tera.         |  |
| preliminary examining authority:  European Patent Office - P.B. 5818 Patentlaan 2  NL-2280 HV Rijswijk - Pays Bas |  |  | Duchatellier, M                                 | · · · · · · · · · · · · · · · · · · ·   | ) tunna Priza |  |
| Tel. +31 70 340 - 2040 Tx: 31 651 epo nl<br>Fax: +31 70 340 - 3016  |  | Telephone No. +31 70                                 | 340-2272  | 3. saller   |               |  |

# INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

International application No. PCT/GB2004/004313

|    | Box No. I     | Basis of the report   |
|----|---------------|---|
| 1. | With regard   | d to the <b>language</b> , this report is based on the international application in the language in which it was so otherwise indicated under this item.  |
|    | ☐ This rewind | eport is based on translations from the original language into the following language , is the language of a translation furnished for the purposes of:   |
|    | lua 🔲         | ernational search (under Rules 12.3 and 23.1(b))  blication of the international application (under Rule 12.4)  ernational preliminary examination (under Rules 55.2 and/or 55.3)   |
| 2. | have been     | d to the <b>elements*</b> of the international application, this report is based on <i>(replacement sheets which furnished to the receiving Office in response to an invitation under Article 14 are referred to in this originally filed" and are not annexed to this report):</i> |
|    | Description   | ı, Pages  |
|    | 1-11          | as originally filed   |
|    | Claims, Nu    | mbers   |
|    | 1-6           | received on 21.12.2005 with letter of 19.12.2005  |
|    | Drawings,     | Sheets  |
|    | 1/4-4/4       | as originally filed   |
|    | □ a seq       | uence listing and/or any related table(s) - see Supplemental Box Relating to Sequence Listing   |
| 3. | ☐ The a       | mendments have resulted in the cancellation of:   |
|    |               | e description, pages<br>e claims, Nos.  |
|    | □ the         | e drawings, sheets/figs   |
|    | □ an          | e sequence-listing-(specify):   |
| 4. | had not be    | report has been established as if (some of) the amendments annexed to this report and listed below seen made, since they have been considered to go beyond the disclosure as filed, as indicated in the intal Box (Rule 70.2(c)).   |
|    | ☐ the         | e description, pages e claims, Nos.   |
|    | □ the         | e drawings, sheets/figs<br>e sequence listing <i>(specify)</i> :<br>y table(s) related to sequence listing <i>(specify)</i> :   |
|    | * If i        | tem 4 applies, some or all of these sheets may be marked "superseded."  |

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### INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

International application No. PCT/GB2004/004313

Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial Box No. V applicability; citations and explanations supporting such statement

1. Statement

Novelty (N)

Yes: Claims

1-6

No: Claims

No:

Inventive step (IS)

Yes: Claims

1-6

Industrial applicability (IA)

Yes: Claims

Claims

1-6

Claims No:

2. Citations and explanations (Rule 70.7):

see separate sheet

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### Re Item V

Reasoned statement with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1). Reference is made to the following documents:

D1: US-A-2003118078

D2: WO-A-0102089

D3\*: J. of Appl. Polymer science, Part B: Polymer Physics, vol. 34, pages 2783-2804, Zhuomin Ding et al.: "an experimental method for studying non isothermal crystallization of polymers at very high cooling rates".

D4: GB-A-2202941

- \* This document was cited in D1 (paragraph 317)
- 2). The invention relates to a method of measuring temperature value associated with melting, softening or decomposition by heating an array of samples on a support tray and determining optically a change of phase.

Such a method is known from D1 (cf. paragraphs 316-323 and figure 28).

The problem to be solved is to screen easily multiple samples in a single operation.

This problem is solved by illuminating the support tray and the whole array of samples, imaging the array of sample by a digital device and using image processing software to detect changes in the image of the array.

——No available document recites this solution and this solution cannot be considered as obvious by the skilled man. consequently, the subject-matter of claim 1 fulfills the requirements of Article 33(3) PCT.

3). Dependent method-claims 2-4.

Claims 2-4 are dependent on claim 1 and as such also meet the requirements of the PCT with respect to novelty and inventive step.

4). Independent apparatus-claim 5.

For similar reasons as put forward concerning claim 1, the subject-matter of claim 5 meets also the requirements of the PCT with respect to novelty and inventive step.

5). Dependent apparatus-claim 6.
Claim 6 is dependent on claim 5 and as such also meets the requirements of the

### INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY (SEPARATE SHEET)

International application No.

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PCT with respect to novelty and inventive step.

- 6). Contrary to the requirements of Rule 5.1(a)(ii) PCT, the relevant background art disclosed in the documents D1 and D4 is not mentioned in the description, nor are these documents identified therein.
  - 7). The independent claims are not in the two-part form.
- 8). The features of the claims are not provided with reference signs placed in parentheses (Rule 6.2(b) PCT).
  - 9). The description has not been amended in accordance with new claim 1.